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IDENTIFIER:  
TITLE: PRINTED CIRCUIT BOARD AND ELECTRONIC COMPONENT  
PACKAGE USING THE SAME  
  
PUBN-DATE: March 15, 2002

**INVENTOR-INFORMATION:**

NAME	COUNTRY
TANAKA, HIROBUMI	N/A
KUWABARA, NAOKI	N/A
FUJITA, KAZUTO	N/A
MORITA, MORIJI	N/A

**ASSIGNEE-INFORMATION:**

NAME	COUNTRY
MITSUI CHEMICALS INC	N/A

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**ABSTRACT:**

PROBLEM TO BE SOLVED: To use a Pb-free high melting point solder having a low environmental load without lowering a mounting yield by raising the degree of adhesion of a sealing resin with a plated surface.

SOLUTION: The Pb-free high melting point solder can be used by lowering a grain boundary density of an Ni-plating of a substrate by raising a mean phosphorus concentration of electroless Ni-plating to 7 to 10 wt.%, raising the degree of adhesion of an Au-plating layer of an upper layer with the sealing resin, and completing filling of a molding resin so that a molding part may not burst at a solder ball forming time.

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